

Title (en)

DEVICE AND METHOD FOR SORTING APPROXIMATELY ENCRYPTED CIPHERTEXT

Title (de)

VORRICHTUNG UND VERFAHREN ZUM SORTIEREN VON ANNÄHERND VERSCHLÜSSELTEM CHIFFRE-TEXT

Title (fr)

DISPOSITIF ET PROCÉDÉ DE TRI D'UN TEXTE CHIFFRÉ APPROXIMATIVEMENT CHIFFRÉ

Publication

**EP 3982586 A1 20220413 (EN)**

Application

**EP 20818508 A 20200605**

Priority

- US 201962857617 P 20190605
- KR 20200036119 A 20200325
- KR 2020007350 W 20200605

Abstract (en)

Disclosed is a calculation device. The present calculation device includes: a memory for storing a plurality of homomorphic ciphertexts for an approximate message including an error; and a processor for sorting the plurality of homomorphic ciphertexts by using a 5-way sorter which can sort five homomorphic ciphertexts in a single stage.

IPC 8 full level

**H04L 9/00** (2022.01); **G06F 17/10** (2006.01)

CPC (source: EP US)

**G06F 7/24** (2013.01 - EP); **H04L 9/008** (2013.01 - EP US); **H04L 9/06** (2013.01 - US); **G06F 2207/228** (2013.01 - EP);  
**H04L 2209/125** (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3982586 A1 20220413; EP 3982586 A4 20230719**; US 2022255722 A1 20220811; WO 2020246848 A1 20201210

DOCDB simple family (application)

**EP 20818508 A 20200605**; KR 2020007350 W 20200605; US 202017616349 A 20200605